Best Management Practices

The citizens of California live with the endemic risk of mosquito and vector-borne disease, with some areas experiencing nearly year-round potential exposure to a host of vector-transmitted diseases such as West Nile virus. Additional health threats associated with mosquitoes and other vectors have recently emerged due to a number of factors, including climate change and increased ease of travel. New species of mosquitoes have been imported into the state that previously could not survive year-round, but are now gaining a foothold in highly-populated areas. Additionally, increasing number of imported human cases of tropical diseases such as dengue and chikungunya creates an increased risk for a mosquito-borne disease outbreak that can potentially spread very rapidly throughout California.

California’s best public health defense is consistent, efficient, and effective mosquito control. MVCAC uses an integrated approach to mosquito management which begins with the elimination of mosquito production.

AB 896 - WILDLIFE MANAGEMENT AREAS AND MOSQUITO CONTROL

AB 896 (Eggman), which passed the Legislature and was signed by the Governor in 2014, requires the Department of Fish and Wildlife (DFW) to prioritize wildlife management areas that have the highest need for BMPs to reduce mosquito production.

BMPs have been found to reduce mosquito populations while reducing the need to use pesticides to abate mosquito production. If BMPs are not used and a mosquito control district is forced to abate the mosquito production, DFW is legally required to reimburse the costs of abatement. When implemented, AB 896 can reduce the need for abatement, enhance wetland habitat, and potentially save DFW reimbursement costs, while enhancing the ability to protect public and wildlife health from mosquito-borne diseases.

Additionally, the use of BMPs on wildlife management areas can result in minimizing or eliminating mosquito production while maintaining or enhancing the waterfowl and other wildlife values of the habitat.

AB 896 recognizes the need to prioritize BMPs based on appropriate criteria. Its full implementation is a small but important step to ensure that California maximizes the ability to control mosquito populations in wildlife areas using existing resources.

MOSQUITO RESEARCH FUNDING

A 2014 UCLA study that focused on tropical and African climates indicated that higher temperatures and lower precipitation will lead to more West Nile virus infections. The California Department of Public Health points to California’s current drought as a key reason for the increase in West Nile virus infections. The California legislature can make a difference in stemming the tide of disease by funding key mosquito research programs for a mere $300,000.

California has historically provided funding for mosquito research, but that eroded in 2008 due to the state's budget crisis. Without state investment, vector control agencies will not be able to effectively protect public health. Harnessing new research and cutting edge surveillance will improve the state’s ability to identify emerging threats and prevent mosquito-borne illness, and make California an international leader in battling climate-related public health issues.